portion is provided to the case to fix the coaxial cable thereto by being fitted into the at least one recessed portion.

[0025] Preferably, a recessed portion is formed on the outer insulating layer to expose the portion of the second connecting wire externally and a fixing portion is provided to the case to fix the coaxial cable thereto by being fitted into the recessed portion.

[0026] Preferably, the fixing portion is integrally formed with the case and the case is formed of a metal based material having good electric conductivity.

[0027] In another aspect of the present invention, a communication terminal includes a coaxial cable assembly including a first connecting wire, an inner insulating layer configured to enclose the first connecting wire, a second connecting wire enclosing the inner insulating layer, an outer insulating layer configured to enclose the second connecting wire in a manner of exposing a portion of the second connecting wire, and a circuit part connected to the second connecting wire to cut of electric waves.

[0028] Preferably, the first connecting wire electrically connects a wireless communication unit including an antenna and a PCB part loaded with various electronic parts together and the second connecting wire electrically connects a power supply unit and the PCB part together.

[0029] Preferably, the circuit part includes a grounding part connected to the second connecting wire to ground the second connecting wire and a capacitor provided between the second connecting wire and the grounding part.

[0030] Preferably, a plurality of penetration holes configured to be penetrated in a longitudinal direction are formed in the inner insulating layer and a plurality of the penetration parts are filled up with air.

[0031] Preferably, a plurality of penetration holes configured to be penetrated in a longitudinal direction are formed in the inner insulating layer and a plurality of the penetration parts are filled up with air.

[0032] Preferably, a signal carried by the first connecting wire is an RF signal and a signal carried by the second connecting wire is a power signal.

[0033] Preferably, a signal carried by the first connecting wire is an RF signal and a signal carried by the second connecting wire is a power signal.

[0034] Preferably, the circuit part further includes a connecting portion between the second connecting wire and the capacitor and a different wire is connected in parallel to the connecting portion.

[0035] Therefore, the present invention enables at least two kinds of electric signals can be carried by a single coaxial cable or a coaxial cable assembly.

[0036] And, the present invention enables a whole case to work as a grounding part to avoid a separate grounding part.

[0037] According to one aspect, the invention provides a communication terminal comprising: a coaxial cable comprising: a first connecting wire, an inner insulating layer configured to enclose at least a part of the first connecting wire, a second connecting wire configured to enclose at least a part of the inner insulating layer, and an outer insulating layer configured to enclose at least a part of the second connecting wire and to expose a portion of the second connecting wire; and a case having a part in contact with the exposed portion of the second connecting wire.

[0038] According to another aspect, the invention provides a communication terminal including a coaxial cable assembly, the coaxial cable assembly comprising: a first connecting wire; an inner insulating layer configured to enclose at least a part of the first connecting wire; a second connecting wire configured to enclose at least a part of the inner insulating layer; an outer insulating layer configured to enclose at least a part of the second connecting wire; and at least one circuit part connected to the second connecting wire to cut of electric waves.

[0039] According to another aspect, the invention provides a mobile terminal comprising: a case including a plurality of electronic components therein; and at least one coaxial cable including: a first connecting wire configured to carry a first type electrical signal between two of the electronic components, an insulating layer configured to surround substantially the first connecting wire, and a second connecting wire configured to surround substantially the insulating layer and to carry a second type electrical signal different from the first type electrical signal between two of the electronic components.

[0040] It is to be understood that both the foregoing general description and the following detailed description of the present invention are exemplary and explanatory and are intended to provide further explanation of the invention as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0041] The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this application, illustrate embodiments of the invention and together with the description serve to explain the principle of the invention. In the drawings:

[0042] FIG. **1** is a block diagram of a communication terminal according to one embodiment of the present invention;

[0043] FIG. **2** is a front perspective diagram of a communication terminal according to one embodiment of the present invention;

[0044] FIG. **3** is a rear perspective diagram of a communication terminal according to one embodiment of the present invention;

[0045] FIG. **4** is a perspective diagram of a coaxial cable provided to a communication terminal according to one embodiment of the present invention;

[0046] FIG. **5** is a diagram of an interior of a communication terminal according to one embodiment of the present invention;

[0047] FIG. **6** is a perspective diagram of a coaxial cable assembly provided to a communication terminal according to one embodiment of the present invention; and

[0048] FIG. **7** is a diagram of an interior of a communication terminal provided with the coaxial cable assembly shown in FIG. **6** according to one embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0049] Reference will now be made in detail to the preferred embodiments of the present invention, examples of which are illustrated in the accompanying drawings. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like parts.

[0050] First of all, a communication terminal according to preferred embodiments) of the present invention is explained in aspect of elements according to functions.